

WHAT IS CLAIMED IS:

1. An electromagnetic brake interposed between a stationary housing and a rotational member which is accommodated at least partially in the stationary
5 housing, the electromagnetic brake comprising:

a multi-plate brake mechanism having a plurality of brake plates attached to the stationary housing and a plurality of brake discs attached to the rotational member in such a manner as to be
10 interleaved with the plurality of brake plates;

a ring-like core member having an annular groove and a first outside diameter and fixed within the housing;

an annular exciting coil accommodated in the
15 annular groove in the core member;

a ring-like armature member having a second outside diameter which is larger than the first outside diameter and disposed in such a manner as to confront the annular groove in the core member;

20 a cylindrical press member having a first end and a second end and fitted on the core member in such a manner as to freely move in a direction in which the multi-plate brake mechanism is pressed, the first end being fixed to an outer
25 circumferential portion of the armature member, the

second end being brought into engagement with the multi-plate brake mechanism; and

5 a cylindrical guide member fixed to an inner circumferential portion of the armature member at one end thereof and fitted in the core member so that the armature member is guided by the core member so as to move in the direction in which the multi-plate brake mechanism is pressed.

10 2. The electromagnetic brake as set forth in Claim 1, wherein the housing and the cylindrical press member are formed from an identical material.

15 3. The electromagnetic brake as set forth in Claim 1, wherein the housing and the cylindrical press member are formed from aluminum alloy.